

***Remarks***

Reconsideration of this Application is respectfully requested.

Upon entry of the foregoing amendment, claims 49-67 are pending in the application, with claim 49 being the sole independent claim. Claims 1-48 are sought to be cancelled without prejudice to or disclaimer of the subject matter therein. New claims 49-67 are sought to be added.

It is believed that the amendments presented above will place the application in condition for allowance and/or in better form for appeal. The new claims introduce no new matter and present no new issues requiring further consideration or search. Support for new claims 49-67 can be found throughout the specification, for example, at page 6, line 20 through page 10, line 7. It is respectfully requested that the amendments after final action be entered. *See* 37 C.F.R. § 1.116(b).

A paragraph captioned "Cross Reference to Related Applications" is sought to be added to the specification in order to provide specific reference to prior applications to which priority is claimed. This paragraph does not introduce any new matter.

Based on the above amendment and the following remarks, Applicants respectfully request that the Examiner reconsider all outstanding objections and rejections and that they be withdrawn.

**I. Priority**

The Examiner stated that an application in which the benefits of earlier applications are desired must contain a specific reference to the prior applications in the first sentence of the specification *or in an application data sheet*. (Paper No. 10, page 2.)

Applicants have added a paragraph to the specification captioned "Cross Reference to Related Applications." This paragraph specifies that the present application is a continuation of U.S. Patent Application No. 09/018,989, filed February 5, 1998, which is a continuation of U.S. Patent Application No. 08/525,140, filed September 8, 1995, now U.S. Patent No. 5,759,778, which is a continuation of U.S. Patent Application No. 08/103,769, filed August 10, 1993, now U.S. Patent No. 5,500,356.

Applicants note that an Application Data Sheet making specific reference to the prior applications was filed on December 5, 2001. Therefore, the requirements of 37 C.F.R. § 1.78 were fully satisfied as of the filing date of this application. *See also* 37 C.F.R. § 1.76(b)(5).

**II. Claim Rejection Under 35 U.S.C. § 102**

**A. Radding**

Claims 28-33, 38-43 and 46 were rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by U.S. Patent No. 4,888,274 to Radding *et al.* ("Radding"). (*See* Paper No. 10, page 5.) Applicants respectfully traverse this rejection and submit that this rejection cannot properly be applied to the currently presented claims.

An anticipation rejection under 35 USC § 102 requires a showing that each claim element is found in a single reference, practice, or device. *See In re Donohue*, 766 F.2d 531, 226 USPQ 619, 621 (Fed. Cir. 1985). Since Radding does not teach a method having all of the elements of the present claims, the rejection under 35 U.S.C. § 102 should be withdrawn.

The present claims are directed to methods for recovering one or more desired circular target nucleic acid molecules. The presently claimed methods comprise, *inter alia*, obtaining a sample comprising one or more *single-stranded* desired circular target nucleic acid molecules and incubating the sample in the presence of one or more haptenylated nucleic acid probe molecules. Radding does not teach a method comprising obtaining a sample comprising one or more *single-stranded* desired circular target nucleic acid molecules and incubating the sample in the presence of one or more haptenylated nucleic acid probe molecules. Therefore, Radding cannot and does not anticipate the present claims. Applicants respectfully request that this rejection be reconsidered and withdrawn.

**B. Abe**

Claims 28, 30, 31, 33, 38, 39, 41, 43, 46 and 47 were rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by JP 4-108384 ("Abe"). (*See* Paper No. 10, page 6.) Applicants respectfully traverse this rejection and submit that this rejection cannot properly be applied to the currently presented claims.

Abe does not teach a method having all of the elements of the present claims. The present claims are directed to methods for recovering one or more desired *circular* target nucleic acid molecules. The claimed methods comprise, *inter alia*, obtaining a sample comprising one or more single-stranded desired *circular* target nucleic acid molecules, and

incubating the sample in the presence of one or more hapteneylated nucleic acid probe molecules under conditions sufficient to permit one or more of the probe molecules to hybridize to one or more of the desired *circular* target nucleic acid molecules.

Abe does not teach a method comprising obtaining a sample comprising one or more single-stranded *circular* target nucleic acid molecules and incubating the sample in the presence of one or more hapteneylated nucleic acid probe molecules under conditions sufficient to permit one or more of the probe molecules to hybridize to one or more of the desired *circular* target nucleic acid molecules. Abe therefore does not and cannot anticipate the present claims. Applicants respectfully request that this rejection be reconsidered and withdrawn.

**C. Tagle**

Claims 28, 30, 31, 33, 38, 39, 41, 43, 46 and 47 were rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by Tagle *et al.*, *Nature* 361:751-753 (1993) ("Tagle"). (See Paper No. 10, page 6.) Applicants respectfully traverse this rejection and submit that this rejection cannot properly be applied to the currently presented claims.

First, Tagle cannot be used in an anticipation rejection under 35 U.S.C. § 102(b). Section 102(b) is a bar to patentability only if the invention was patented or described in a printed publication in this or a foreign country or in public or on sale in this country, *more than one year prior to the date of the application for patent in the United States*. The present application claims the benefit of the filing date of U.S. Patent Application No. 08/103,769, filed August 10, 1993. Tagle appeared in the February 25, 1993 issue of

*Nature*, less than one year before the effective filing date of the above-captioned application.

Therefore, Tagle cannot be relied upon for a rejection under 35 U.S.C. § 102(b).

Moreover, Tagle does not teach a method having all of the elements of the present claims. In particular, Tagle does not teach a method comprising obtaining a sample comprising one or more single-stranded *circular* target nucleic acid molecules and incubating the sample in the presence of one or more hapteneylated nucleic acid probe molecules under conditions sufficient to permit one or more of the probe molecules to hybridize to one or more of the desired *circular* target nucleic acid molecules. Tagle therefore does not and cannot anticipate the present claims. Applicants respectfully request that this rejection be reconsidered and withdrawn.

### ***III. Claim Rejections Under 35 U.S.C. § 103***

#### ***A. Radding In View of Florkiewicz and Knappe***

Claims 28-33, 38-43, 46 and 48 were rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Radding in view of U.S. Patent No. 6,028,058 to Florkiewicz ("Florkiewicz") or U.S. Patent No. 5,989,867 to Knappe *et al.* ("Knappe"). (*See* Paper No. 10, page 7.) Applicants respectfully traverse this rejection and submit that this rejection cannot properly be applied to the currently presented claims.

Neither Florkiewicz nor Knappe are prior art to the present application. The present application claims the benefit of the filing date of U.S. Patent Application No. 08/103,769, filed August 10, 1993. Florkiewicz issued on February 22, 2000 from U.S. Patent Appl. No. 08/897,924, filed July 21, 1997. Knappe issued on November 23, 1999 from U.S. Patent

Appl. No. 08/934,959, filed September 22, 1997, and claimed the benefit of U.S. Provisional Patent Appl. No. 60/027,368, filed September 23, 1996. Thus, neither Florkiewicz nor Knappe are prior art and cannot properly be relied upon for a rejection under 35 U.S.C. § 103(a).

Applicants therefore respectfully request that this rejection be reconsidered and withdrawn.

**B. Radding In View of Symons**

Claims 28-33 and 38-46 were rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Radding in view of U.S. Patent No. 4,898,951 to Symons ("Symons") (*See* Paper No. 10, page 8.) Applicants respectfully traverse this rejection and submit that this rejection cannot properly be applied to the currently presented claims.

Neither Radding nor Symons, alone or collectively, teach or suggest all of the elements of any of the currently presented claims. In particular, neither reference teaches or suggests a method comprising obtaining a sample comprising one or more single-stranded desired circular target nucleic acid molecules and incubating the sample in the presence of one or more haptenylation nucleic acid probe molecules. Therefore, a *prima facie* case of obviousness has not been established with respect to the present claims. Applicants respectfully request that this rejection be reconsidered and withdrawn.

**C. Radding In View of Sambrook**

Claims 28-43 and 46 were rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Radding in view of Sambrook *et al.*, "Molecular Cloning: A Laboratory

Manual," 2<sup>nd</sup> Ed., Sambrook *et al.*, Eds., Cold Spring Harbor Laboratory Press, Cold Spring Harbor, NY, 1989 ("Sambrook"). (See Paper No. 10, page 9.) Applicants respectfully traverse this rejection and submit that this rejection cannot properly be applied to the currently presented claims.

Neither Radding nor Sambrook, alone or collectively, teach or suggest all of the elements of any of the currently presented claims. In particular, neither reference teaches or suggests a method comprising obtaining a sample comprising one or more single-stranded desired circular target nucleic acid molecules and incubating the sample in the presence of one or more haptenylation nucleic acid probe molecules. Therefore, a *prima facie* case of obviousness has not been established with respect to the present claims. Applicants respectfully request that this rejection be reconsidered and withdrawn.

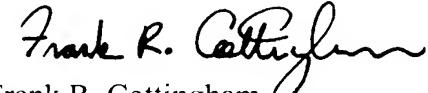
### ***Conclusion***

All of the stated grounds of objection and rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding objections and rejections and that they be withdrawn. Applicants believe that a full and complete reply has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Amendment and Reply is respectfully requested.

Respectfully submitted,

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